

## Regis University ePublications at Regis University

---

### All Regis University Theses

---

Spring 2006

# Organizational Change of Parking Systems at University of Colorado Hospital

Sarah S. Kabat

*Regis University*

Follow this and additional works at: <https://epublications.regis.edu/theses>



Part of the [Business Commons](#)

---

### Recommended Citation

Kabat, Sarah S., "Organizational Change of Parking Systems at University of Colorado Hospital" (2006). *All Regis University Theses*. 300.

<https://epublications.regis.edu/theses/300>

This Thesis - Open Access is brought to you for free and open access by ePublications at Regis University. It has been accepted for inclusion in All Regis University Theses by an authorized administrator of ePublications at Regis University. For more information, please contact [epublications@regis.edu](mailto:epublications@regis.edu).

**Regis University**  
School for Professional Studies Graduate Programs  
**Final Project/Thesis**

# **Disclaimer**

Use of the materials available in the Regis University Thesis Collection ("Collection") is limited and restricted to those users who agree to comply with the following terms of use. Regis University reserves the right to deny access to the Collection to any person who violates these terms of use or who seeks to or does alter, avoid or supersede the functional conditions, restrictions and limitations of the Collection.

The site may be used only for lawful purposes. The user is solely responsible for knowing and adhering to any and all applicable laws, rules, and regulations relating or pertaining to use of the Collection.

All content in this Collection is owned by and subject to the exclusive control of Regis University and the authors of the materials. It is available only for research purposes and may not be used in violation of copyright laws or for unlawful purposes. The materials may not be downloaded in whole or in part without permission of the copyright holder or as otherwise authorized in the "fair use" standards of the U.S. copyright laws and regulations.

Running head: ORGANIZATIONAL CHANGE AT COLORADO HOSPITAL

## Organizational Change of Parking Systems at University of Colorado Hospital

Sarah S. Kabat

Regis University

### Abstract

During a move from the 9<sup>th</sup> Avenue campus to the new Fitzsimons campus, University of Colorado Hospital made improvements to the existing parking policies. The new parking policies were met with resistance and complaints by employees. This problem caused employee tardiness, lowered morale, and decreased job satisfaction. Data gathered through secondary data, questionnaires and group interviews provided information establishing the extent and nature of the resistance to the new parking policies. Validity was enhanced through multiple methods. Through action research, underlying reasons were investigated for these parking issues and the researcher proposed a collaborative strategy to improve the systems related to parking for University of Colorado Hospital employees through an enhanced communication effort and increased use of security guards in parking lots during peak arrival and departure times.

### Organizational Change of Parking Systems at University of Colorado Hospital

While parking may not seem like an issue that warrants the attention and dedication of an action research project, it becomes of great importance when driving to any destination, making a daily trip to the store, picking up a child or do almost any task outside of being at home or work. During a move to a new campus, University of Colorado Hospital (UCH) changed and improved the parking policies for the employees. Despite the improvements, the new policies have been met with resistance and complaints. The purpose of this project was to uncover the issues related to the parking problem and propose an intervention. Through an action research model, this project explores the background of the organization and the problems related to parking. A literature review will be used to explore pertinent findings related to the parking problem.

Action research was used to explore an existing problem with parking at the Fitzsimons campus of The University of Colorado Hospital. This research process included finding reasons for the problem through data collection and analysis of the data. Analyzing the data culminated in the suggestion of three potential solutions to the problem. The action research model chosen for this project defined the methodology for conducting research, including the rationale for choosing the specific action research model which focuses on ownership of the problem. Specific data gathering methods, including a review of secondary data, questionnaires, and group interviews were utilized to collect data. This project incorporates methodologies that work toward validity. Upon approval from the leadership at UCH, the action research process began and the project moved toward providing an appropriate solution for the resistance to the new parking policies.

*Background of the Organization*

Founded in 1921 by the Colorado General Assembly, University of Colorado Hospital was a state institution originally named Colorado General Hospital. The hospital was renamed University Hospital in 1978 by the Colorado General Assembly and remained a state institution. In 1991, the hospital transitioned from a state entity to a corporate and political subdivision of the state of Colorado by mandate of the Colorado General Assembly. University of Colorado Hospital's mission is to serve as the principal teaching hospital for the University of Colorado at Denver and the Health Sciences Center. It is dedicated to serving the people of Colorado and the nation by doing each of the following: (a) excelling in the education of health professionals, (b) delivering comprehensive patient care, (c) advancing knowledge through research (University of Colorado Hospital, 2005). The campus and facilities are utilized by both UCH and University of Colorado Denver Health Sciences Center (UCDHSC).

University of Colorado Hospital (UCH) is the largest academic medical center in the Rocky Mountain Region, with 450 beds (University of Colorado Hospital, 2005). In 2004, UCH recorded approximately 87,000 inpatient days and approximately 540,000 outpatient visits (University of Colorado Hospital, 2004). The patient population consists of both indigent patients and the patients from Health Management Organizations (HMO) that contract with UCH. In order to accommodate growth in UCH's patient population, the leadership decided to relocate the hospital from the 9<sup>th</sup> Avenue and Colorado Boulevard (9<sup>th</sup> Avenue) campus to the decommissioned Fitzsimons Army Medical base in Aurora, Colorado, in 2000. This new campus currently houses the Anschutz Outpatient Pavilion, the Rocky Mountain Lions Eye and the newly opened Anschutz Inpatient Pavilion.

As the largest regional academic medical center, University of Colorado Hospital employs approximately 3,500 full-time employees. Patient care is provided by both UCH and UCDHSC employees. The physicians and some other medical practitioners are employees of UCDHSC and utilize the hospital facility to care for their patients.

The transition from 9<sup>th</sup> Avenue has been planned to take approximately 12 years, but construction and funding are 4 years ahead of schedule. With the opening of the Anschutz Inpatient Pavilion in February of 2004 and the continuous migration of services from the 9<sup>th</sup> Avenue campus, the number of employees at Fitzsimons campus continues to grow. I joined the organization 6 years ago in the role of a fundraising officer, one of the first groups to move to Fitzsimons. As programs developed at UCH, I took over as director of the Executive Health Program, which is an outpatient program housed in the Anschutz Inpatient Pavilion at the Fitzsimons campus. There have been multiple challenges during the transition, including the provision of parking at a new facility where the allocation and purpose of land use is constantly changing.

*History of the competitive environment.* While the University of Colorado Hospital faces no competition regionally as a medical research facility, competition for health care workers in the Denver metro area has greatly increased. During the last 3 years, five new hospitals have been built and many more are rebuilding bigger and more competitive facilities. This trend in new health care facilities creates a competitive environment for health care workers, especially registered nurses. Additionally, there is more competition for patients and contracts with health maintenance organizations (HMO's). Individuals now have many choices where to receive their medical care, based on reputation and proximity to work or home.

*Problem*

Providing safe, convenient and economical parking for employees of a 24-hour, 365 day organization requires complex strategies. The move to the new campus seemed to provide an opportunity to create improved, organization-specific parking policies to meet the hospital's needs. Yet, as the hospital began to provide improved parking options, employees began to express dissatisfaction and resistance.

*History of the problem.* The policies for University of Colorado Hospital employee parking at the 9<sup>th</sup> Avenue campus are under the management of University of Colorado Denver Health Sciences Center (UCDHSC). Employees parking at the old campus were charged a monthly fee and were placed on a waiting list for 9 to 12 months, prior to being assigned a parking location. All parking structures were shared with UCH and UCDHSC employees, both of whom work at the 9<sup>th</sup> Avenue campus. During strategic planning for the move to the Fitzsimons campus, UCH leadership agreed to terminate the parking relationship with UCDHSC and manage their own employee parking program at the new facility. The parking policies for the new campus included no-cost parking for employees. Additionally, employees who work at the new campus are assigned a parking location upon new employment or transfer to the Fitzsimons campus, eliminating the waiting list problem from 9<sup>th</sup> Avenue. Parking lots would now be assigned based on employment or affiliation with either UCH or UCDHSC.

As outpatient and inpatient services migrated to the new campus, both current and new employees began to work at the Fitzsimons campus. The hospital rolled out the new parking policies, which included the elimination of fees and immediate assignments for parking locations. Additionally, UCH agreed to provide parking for some UCDHSC employees who provided clinical care at the hospital, but not for UCDHSC employees who were doing only



research. With the available land, the hospital has built enough spaces for all UCH employees and most of the UCDHSC affiliated employees.

Serious concerns have been raised by employees about the problems associated with the new parking situation. Complaints include proximity of parking, lack of parking spaces, and the compromise of safety when parking in lots that are not adjacent to the buildings. The concerns also address the amount of time employees spend looking for a space, which results in tardiness for their job. These complaints could have serious impacts on UCH relating to productivity, employee morale, patient care and recruitment of new employees.

*Problem statement.* At the beginning of this research University of Colorado Hospital (UCH) was in the process of transitioning from the original 9<sup>th</sup> Avenue campus to the new Fitzsimons campus. During this transition to the new campus, the mission of the hospital was to provide complimentary employee parking and immediate access to parking spots, with no waiting list. Yet, with adequate parking at no cost, there appeared to be an increased number of employee complaints and resistance to the new policies. This problem has caused employee tardiness and lowered morale, resulting in decreased productivity, potentially lower patient satisfaction and a decreased ability to recruit and retain faculty and staff. The purpose of this action research project was to investigate the underlying reasons for these parking issues and propose a collaborative strategy to improve the systems related to parking for University of Colorado Hospital employees.

### *Literature Review*

*Technical parking issues.* While researching information related to parking problems, certain technical aspects of parking seemed applicable to the problems at University of Colorado Hospital. Through the summary of an article that examined the challenges of parking at

healthcare facilities, three challenges somewhat unique to parking were explored. The first challenge related to healthcare parking is the complex nature of providing acceptable parking for an institution that provides core functions 24 hours each day (Burns, 2005). Addressing the problems related to shift changes for an organization that functions this way presents complex challenges. This article also indicates that parking access has increased as a factor in the competitive employment arena in healthcare (Burns). The increased number of visitors, patients and employees that have permanent or temporary disabilities also impacts planning for parking and creates an additional set of challenges (Burns). All of these challenges may be related to the increased complaints regarding parking at University of Colorado Hospital.

Additional information specific to health facility parking indicates that there is a shift in methods used to plan and implement parking at hospitals. Data gathered from over 200 hospitals shows that employees account for 75% of a hospital's parking demand (Anderson, 1996), and this article illustrates the importance of understanding employee parking demand as a tool to solving campus parking problems. Anderson's study indicated that gathering data through surveys and questionnaires provided valuable information. Subsequently, data could be used with a planning model called the Parking Allocation Model (Anderson). Planning for parking using this method includes the analyzing the demands of multiple user groups and proper allocation of parking resources. Allocations for parking need to be accurate, meet the needs of both employees and the organization, and be flexible to accommodate change. University of Colorado Hospital may benefit with the use of a Parking Allocation Model.

*Communication.* Potentially, communication about the changes in parking from the 9<sup>th</sup> Avenue campus to the new Fitzsimons campus may be related to the parking problems at University of Colorado Hospital. Whitworth and Riccomini (2005) summarized the importance

of managerial communication as an effective tool for job performance. In today's environment, managers have less time and more people to supervise. Coupled with employee communication plans that favor mass-media, communication directly from a manager to an employee is becoming less frequent (Whitworth & Riccomini). The study conducted in this article showed effective managerial communication correlates to increased employee job performance. Managers who meet face to face with employees provide a context for the information that employees receive. Meeting in person also presents an opportunity to discover and answer questions about changes and new initiatives (Whitworth & Riccomini). A lack of effective communication about the parking changes at UCH may influence the parking dissatisfaction.

*Resistance to change.* An area that of research that provides a potential insight into the parking problems at University of Colorado Hospital is resistance to change. Change within an organization is often met with resistance, yet change must occur. A failure to create a methodology to master and create change may result in poor performance and declining morale (Atkinson, 2005).

Resistance to change may seem like a logical reason for the parking problem at University of Colorado Hospital, but it might not be the main cause of the problem. In order to better understand resistance to change, De Meuse and McDaris (1994) developed the Reaction to Change (RTC) Inventory, which provides a structure to explore and discuss the perceptions and reactions to change by employees. The RTC Inventory considered the reactions to change could be positive, negative or neutral. In tests at three different organizations, participants were more inclined to support change (De Meuse & McDaris). This would indicate that resistance to change is not the main problem with the parking situation at University of Colorado Hospital (UCH).

When resistance to change is encountered in the workplace, certain steps may be taken to encourage and support change. Labianca, Gray and Brass (2000) suggested that resistance to change is more often a result of ingrained schemas and pre-existing frameworks than self-interest. These cognitive barriers can be overcome when old schemas are compared to new ways of thinking during specific periods during the change process (Labianca, Gray & Brass). If resistance to change is the problem at UCH, one way to overcome it is through employee participation in the change process. While some research about employee participation and lowering resistance to change is inconclusive, a study by Lines (2004) resulted in findings that showed a positive relationship between employee participation and the successfulness of implementing strategic change.

Upon researching information related to parking problems, three issues stood out as important factors to consider when analyzing the parking problem at UCH. Parking at hospitals is a major component of employee satisfaction. Satisfactory employee parking is important to the overall success of the organization. Communication is another key element to successful parking policies, both overall communication and information shared by managers. Finally, resistance to change is another factor that might be important when looking at this particular issue at UCH.

### *Entering and Contracting*

Entering and contracting occurs during the beginning of the planned change process (Cummings & Worley, 2005). During this phase of my project, I proposed an action research model to the Vice President of operations at University of Colorado Hospital to investigate the problems associated with the current parking situation at the new campus. After this conversation, I was directed to work with the director of guest services, who oversees all aspects

of parking for the organization. We determined that a problem existed based on a cursory review of employee complaints about the new parking policies, even though parking had been improved during the transition from 9<sup>th</sup> Avenue to Fitzsimons. The manager of guest services helped to propose a collaborative team that consisted of the vice president of operations, the manager of guest services, the director of ambulatory care and the director of inpatient care. This team represented multiple levels within the administration. Access to groups willing to provide data was made possible by the members of this collaborative team.

The organization agreed to provide secondary data as well as access to employees and resources for data collection. The collaborative team agreed to meet in order to review and sign off on the proposed action research plan as well as review data collection methods and assist in analyzing the data. The resources needed for this project included assistance from the IT department in creating and dispersing an electronic questionnaire. The collaborative team approved access and 30-minute allotments to the groups that meet regularly for gathering data through group interviews. The director of parking services provided the secondary data for this project. The possibility of conducting an on-line questionnaire for the second data gathering method was considered and approved by the information technology team.

## Method

### *Action Research*

*Definition.* Action research is a collaborative effort and focuses on problem solving to bring about change. This type of research uses a scientific approach to bring about resolutions to organizational problems. Cunningham (1993, p. 9) defined action research as a process of systematically collecting research data about an ongoing system, the purpose of which is to develop or discover aspects of the system's operation that can lead to improvement and change.

*Rationale.* Certain aspects of Pearce, Robinson and Sandberg's (1989) action research model, such as ownership of the problem and the reflective nature of action research, are especially applicable to the parking problems at University of Colorado Hospital. The problems related to parking at UCH are of serious concern to the President and CEO of the organization, and he has called those responsible for this system to take accountability and address the issue. The reflective nature of this model is applicable to solving problems within UCH because of the inherent nature of learning and problem solving associated with a teaching hospital. Process improvement at UCH typically takes place by reviewing current systems, analyzing baseline information, and identifying benchmarks for improvement.

Creating a change, such as addressing the parking issues at University of Colorado Hospital (UCH) Fitzsimons campus, begins with the identification and ownership of the problem. This is a prescribed first step in almost all action research models and essential for moving toward solutions. Without ownership, Pearce, Robinson and Sandberg (1989) suggested individuals or teams might lack a feeling of responsibility for the consequences if the problem is not resolved. Ownership of the parking problem may also create a more effective collaborative team, dedicated to addressing the issue for which they feel responsible. The leadership at University of Colorado Hospital has successfully overcome many challenges, with the greatest success accompanying initiatives when groups admit responsibility for a problem. Groups that collaborate to find solutions benefit from multiple perspectives as well as different intellectual resources. The varying perspectives of the collaborative team may enhance the ability to solve the parking problem. Combining potentially different perspectives from team members that represent both management and employees added more depth to potential solutions than would working with a group that represents just management or employees.

Parallel learning cycles are another unique aspect of action research. During the first cycle, problem solving goes through four main steps: (a) diagnosing, (b) planning, (c) taking action and (d) evaluating. Learning occurs during these steps as information is uncovered and solutions begin to form. As the research process continues, the collaborative team reflects on each of the steps, looking at the impact of new information. As a group, team members reflect on how to proceed, using data that possibly provided unexpected outcomes. This dual process of learning about learning is meta-learning (Coughlan & Brannick, 2001). Each step in action research is studied as the group moves toward a solution, creating a dynamic element of reflection.

Action research not only proposes to solve the stated problem, but adds a complexity by encouraging reflection of the problem solving process along the way. This is significant when considering solutions for the parking problems at University of Colorado Hospital. As the action research process evolves, the reasons for the resistance to the new parking policies may change as well. The reflective process provided opportunities to monitor the potential changes in the cause of the problem as action research continues.

*Action research model.* To address the problems related to the new parking policies at University of Colorado Hospital (UCH), I followed an action research model. Several action research models could have been utilized for this project, but the problems presented at UCH were appropriately addressed with the action research model defined by Pearce, Robinson, and Sandberg (1989), which incorporates a six step model (Table 1). These steps were followed throughout the planned change process. This model is an appropriate choice to address the desired change within University of Colorado Hospital, because the parking problems were

directly identified by an executive responsible for parking, which is an integral part of the process for Pearce, Robinson and Sandberg (1989).

Table 1

*Six Step Action Research Model Adapted Pearce, Robinson & Sandberg (1989)*

Step Number	Activity
Step 1	Recognize the problem
Step 2	Diagnose the situation
Step 3	Involve members, gather data, confirm the problem, gain ownership
Step 4	Involved members select solution
Step 5	Plan intervention and implement
Step 6	Evaluate the change

In the first step, recognition of a problem was identified by leadership within the organization who wanted to take action. Relevant information was collected and shared with the collaborative group in order to help clarify the nature of the problem. The information collected helped to assess and diagnose the potential problem, defined in step 2.

During the third step, a collaborative team, made up of the vice president of operations, the manager of guest services, the director of ambulatory care and the director of inpatient care, was brought together to take ownership of the problem. Ownership is an essential component of this particular action research model. Pearce and Robinson stated (1989) that without ownership there may be less justification by the team to put in the effort and time necessary to solve the problem. After the collaborative team comes together, data was collected and analyzed in order confirm the problem and examine potential causes.



Step four involves the proposal of an appropriate solution by the involved members, again focusing on the ownership of the solution in order to enhance the effectiveness of the outcome. Planning an intervention to support the solution and implementing the intervention are the next actions to occur during step five. The final step, which is part of every action research model, will be evaluation. This sixth step will provide an opportunity to measure the effectiveness of the proposed change.

### *Data-Gathering Methods*

In order to overcome the bias associated with a single-method data-gathering approach, multiple data gathering methods were selected. Several data collection techniques were utilized during the data collection phases, step 3, of the action research model. Using three different data collection methods instead of relying on only a single method will help to compensate for the deficiency of any single method.

*Secondary data.* The first data-gathering method used in the project was a review of secondary data obtained from University of Colorado Hospital. Beginning with the collection of secondary data serves to establish a baseline for comparative purposes and to help clarify the extent of the problem. Some of the types of secondary data included the number of parking spots, numbers of employees at the new campus, parking maps, a collection of e-mails regarding parking complaints and examples of past communication efforts regarding parking.

Secondary data from the hospital, such as numbers of employees, available parking spots, past communication materials, provided quantifiable data for the project. The disadvantage associated with secondary data can be access to information as well as verifying and assessing the validity of the data. Certain forms of secondary data can be interpreted in a variety of ways, which may lead to incorrect use of the information. These potential problems were addressed by

attempting to collect the most recent data and information collected over consecutive years. Additionally, the organization was asked to clearly define the content of the data and the impetus for the collection of data to try and lower the opportunity for inaccuracy or bias.

*Questionnaires.* Questionnaires are useful as a data collection method because they provide both the opportunity to access large groups of people, as well as the potential for quick turn around for the collection of data (Nadler, 1977). If prepared properly, the strengths of questionnaires will overcome the weaknesses. A weakness of questionnaires is that they can be seen as non-empathic and respondents may have a hard time warming up to a sheet with questions (Nadler). This can be overcome by using specific language and terminology that creates a sense of empathy toward the respondent about the organization's problem.

Data collection through questionnaires is appropriate when collecting data from a large group (Cummings & Worley, 2005). Employees at University of Colorado Hospital are regularly asked to participate in data gathering activities and therefore were more open to participating in this action research project. The frequent use of questionnaires could create a sense of indifference because of potential over-use. Use of the electronic questionnaire did not pose a problem during the data gathering process, which was apparent by the high employee response rate.

The questionnaire consisted of both fixed-response questions to simplify data collection and analysis, as well as, standardized, open-ended questions so that respondents were not limited to categories of responses that may not capture their true experiences and feelings. A Likert-type scale was used for this questionnaire (Fink & Kosecoff, 1998). The questionnaire was distributed through an electronic format provided by Zoomerang to 600 employees and the majority of responses were gathered within 72 hours, even though the completion deadline was 2

weeks. The questionnaire provided valuable information and sparked additional questions that were explored in the group interviews that followed the questionnaire.

*Group interviews.* The third method of data collection was group interviews that combined aspects of both closed- and open-ended responses. Group interviews are an appropriate match for collecting data at University of Colorado Hospital. Because the hospital is a large organization, many groups that meet on a regular basis provided an opportunity to collect data through this method both quickly and effectively.

As a data collection method, interviews have the advantage of being adaptive; creating a scenario where the interviewer may chose an area to investigate more thoroughly (Nadler, 1977). Discussion of different topics related to parking brought to light areas of importance, where the interviewer focused his or her attention. The responses provided a useful source of data. Additionally, as an empathic method for learning about the problem, respondents feel free to provide more information than in a non-empathic type of survey (Nadler).

An inherent problem, interviews are often a lengthy time commitment. This was, by using pre-existing groups and already scheduled meeting times. Bias may appear in recorded information from the interviewer (Nadler, 1977). Strong interview and non-bias recording skills are necessary to use group interviews effectively. To increase strong interview skills, I practiced the interview process many times and recorded responses in an accurate manner to avoid bias.

Two group interviews were conducted in March, 2006 that included 20 University of Colorado Hospital employees working at the Fitzsimons campus. There were a total of 20 employees involved in the interviews who represented employees in positions ranging from upper management to hourly staff positions. A pre-determined set of interview questions (see Appendix B) were presented in a specific order to the participants and answers were recorded on

a computer. The interview sessions were conducted with attempts to minimize bias related to the issue by the facilitator. The facilitator focused on keeping the participants' answers in the general parameters of the questions that were asked, yet allowing for some leeway in the breadth of the discussion.

### *Validity*

Certain steps were incorporated into this action research project in order to enhance its validity. Methodologies chosen for this project enhanced validity, working towards collecting accurate, complete and reliable data.

*Order of and complimentary use of data gathering methods.* The first strategy used to enhance validity is the order of data-gathering methods. By first using secondary data, clarity was provided about the extent of the problem, which increased the accuracy of the future data-gathering methods by establishing a set of baseline causes of the problem. The use of the secondary data provided a starting point for the action research process, based on existing evidence of the problem. This enhances validity by providing some evidence of what might be causing the problem, rather than making assumptions without any evidence. Based on the information provided in the secondary data, a questionnaire was designed to collect data providing a more detailed level of information. Using questionnaires as a second method of data collection enhances validity by cross checking the information provided by the secondary data. Questionnaires are also an appropriate second data-gathering method because they provide access to large groups of individuals for data collection. Gathering information from a large sample increases the breadth of collected data and creates a more complete set of information, enhancing validity. Finally, group surveys were conducted to extract additional data based on the combined findings of secondary data and questionnaires. This order of data collection

methods enhanced validity by sequencing data collection in a manner that explored each set of data at a more explicit level, as dictated by the findings. Data collected through secondary sources and questionnaires provided the opportunity to research broad possibilities for the cause of the problem, avoiding becoming too specific too quickly. Using questionnaires as third method provided an opportunity to thoroughly examine issues that appeared repeatedly, and ascertained a more accurate understanding of those issues and their impact on the problem. Data collected in this order increased the ability to collect a broad and complete set of information by accessing to large samples and accurate data that has been explored on a detailed level by conducting interviews, providing more valid answers to the problem.

In addition to the order of data collection methods, the specific data gathering methods enhanced validity. Combining the quantitative and qualitative data found in all three data gathering methods enhanced validity by combining numerical statistics with potential explanations of why those statistics might exist. Data may present a more complete picture when analyzing numerical information in conjunction with individuals' feelings about the parking problems at University of Colorado Hospital.

Furthermore, surveys and questionnaires can be combined to collect a great deal of valuable information (Nadler, 1977). The strengths of questionnaires are that they are easy to disseminate, provide access to more participants, and offer the opportunity to collect a more complete set of data. On the other hand, their use can fail to communicate empathy, and therefore respondents may provide only limited information about the given problem. The use of questionnaires may hinder data collection by overlooking issues with the use of predetermined questions (Nadler). Interviews compliment the weaknesses of questionnaires by allowing more detailed qualitative data to be gathered and creating an empathic scenario for data collection.

The format of interviews also allows the researcher to follow the lead of the participant in exploring issues related to the problem that may have been overlooked in the questionnaire format. Having collected data from the questionnaire, the group interviews were used to gather information on a more detailed level, increasing the accuracy of the data about potential causes of the parking problems. The use of multiple data-gathering methods, such as questionnaires paired with group interviews, provided an opportunity to cross-check information, by not relying only on the data from a single source, which may not be complete or accurate.

*Collaborative effort to interpret data.* Another strategy for increasing the validity of this project involved the review of data by the collaborative team. As the team members looked at the collected information, they analyzed the data from a parking manager standpoint, an employee view as well as from the position of an executive. Combining all of these perspectives provided varying views of the problem, which increases the validity more than analyzing the data from a single perspective. Enhanced validity of the data minimized the possibility of missing potential interpretations of the data, making the review of data more complete.

*Pilot-test questions.* Pilot testing was performed as a method to ensure the appropriate information is being collected. Using pilot testing for the questionnaire provided necessary information for this project, thereby increasing validity (Fink & Kosecoff, 1998). The collaborative team provided feedback about the scope of the questions. The questions were pilot tested by giving them to a few members of the organization who provided feedback. After the pilot test, the edited questions reflect needed modifications regarding the construction and language of the questions. Validity was enhanced by attempting to collect complete data that encompasses all aspects of the problem.

*Multiple perspectives.* Utilizing multiple perspectives through the appropriate allocation of types of employees in each sample enhanced the validity of the data. More complete information may be provided if employees from different areas and with different responsibilities from within the organization are surveyed and interviewed when gathering data regarding the parking issues at University of Colorado Hospital. Considering the views of administrative employees, nurses and doctors would provide different perspectives on the problems as they relate to specific job demands, seniority, or potentially issues of entitlement. Each group presented unique experiences related to the parking problems, thereby enhancing validity by avoiding only one perspective by gathering more complete data from multiple sources.

*Sample size.* Data collected from the appropriate sample size also helped to enhance validity. The response to the proposed survey may increase the opportunity to obtain a complete set of quantitative data. If the response is too small, the data may not be representative of the problem or complete in nature. A small response to the questionnaire may require a second attempt to collect data through the survey method or a review of the questions, as they may be unclear. This was not the case in this project. An appropriate sample size might be obtained by surveying and interviewing an ample group of individuals, in order to increase the likelihood of receiving an appropriate number of responses, which was the case in this project. The goal was to gather enough data to provide answers about the problem that begin to show repetition and some type of consensus about why the problem exists.

University of Colorado Hospital (UCH) is the largest community hospital in the Rocky Mountain Region and employs 3,500 employees. Parking policies for the organization have undergone changes during the move to a new campus. Employees have expressed complaints and resistance to the new policies and these problems may adversely affect UCH through

decreased productivity, lower morale and poor job satisfaction. Based on these observations, an action research model has been proposed to determine the underlying cause of these problems and work toward a specific intervention.

In order to address the problem, UCH entered into a contract to collect and analyze data related to the problem. Three data collection methods were used, including a review of secondary data, questionnaires and group interviews. To best enhance validity, the data was collected in a precise order along with involving a collaborative team and collect appropriate sample sizes. It is the intention of this project analyze the data and propose the most appropriate interventions to solve the problems related to the new parking policies at University of Colorado Hospital.

### Results

The following information was gathered through the use of three data collection methods: (a) secondary data, (b) questionnaires, and (c) group interviews. This information was collected, interpreted and presented here according to order in which the data was collected.

#### *Secondary Data*

The secondary data activity included a review of pre-collected data. The collaborative group used this information to identify symptoms of the problems related to employee parking. Figure 1 indicated the issues of concern related to parking from e-mails sent to the director of parking.



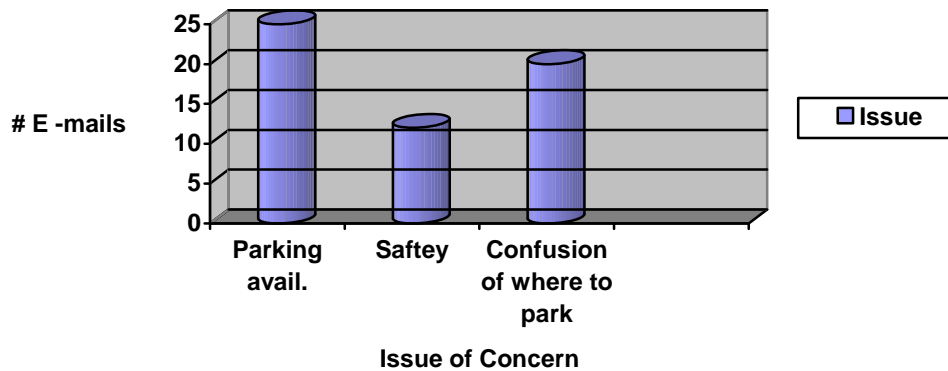


Figure 1. E-mails from University of Colorado Hospital employees regarding parking complaints.

Maps collected prior to the research process showed that there were approximately 700 parking spots, for 800 employees, which accounted for the appropriate number of spots, considering a 20% rate of absenteeism. The maps also showed where the employee parking was located throughout the campus. Finally, parking communications were collected, illustrating the parking changes, such as new parking locations, use of new parking ID tags and the decreased cost of parking. This communication was available to employees on the University of Colorado Hospital website. The collaborative group used these topics from employee e-mails, parking maps, and current and past parking policies to guide the collection of additional data in the survey and group interviews.

#### *Electronic Questionnaire to UCH Employees*

A questionnaire was one of the methods used to collect data related to employee parking at University of Colorado Hospital. Appendix A contains the questionnaire that was approved by the collaborative team and distributed to University of Colorado employees who were currently working at the Fitzsimons campus. The questionnaire garnered a response from 481 employees, an 80% response rate. The following questions, as shown in Table 2, provided the most

definitive responses and indicated some of the key factors in the employee perception of the parking problems.

Table 2

Significant Responses from UCH Employee Parking Questionnaire

Question	Agree/Strongly Agree	Disagree/Strongly Disagree
UCH has provided enough parking for employees?	11%	89%
Personal safety issues related to parking have been addressed by the administration?	33%	66%
Parking at UCH meets my needs?	36%	54%
The administration at UCH values employee input about parking	31%	69%

Employees who indicated general concerns related to parking in order of importance, asked in questions through the questionnaire, ranked them in the order of most concerning, as show in Figure 2.

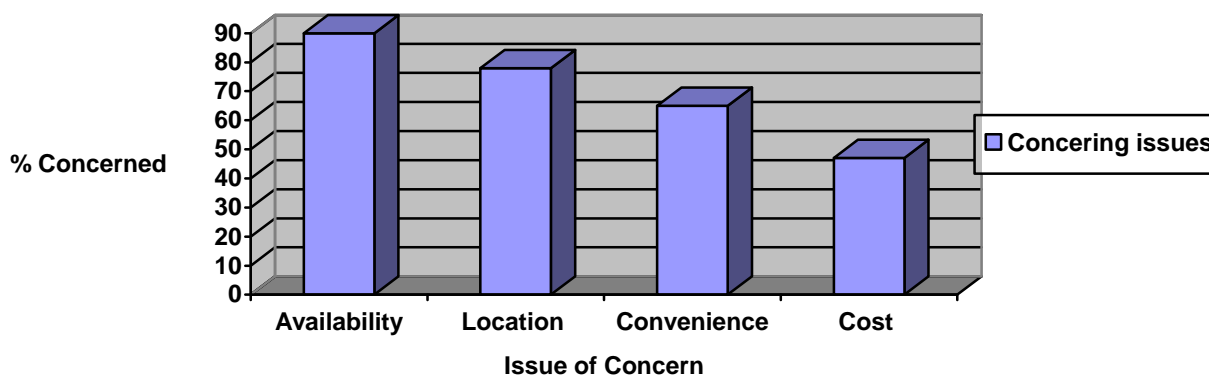


Figure 2. Specific employee parking concerns indicated through electronic questionnaire.

With an overall dissatisfaction level of 61%, 58% of employees indicated that they knew where to register a complaint, yet 30% of employees had actually registered an actual complaint. This generated further questions related to employees feeling that their input was valued.

### *Group Interviews with UCH Employees*

During the group interviews common answers were relayed in categories, as information was presented by the participants commenting on the specific questions, as shown in Table 3.

Table 3

#### *Categories of Employee Feedback from Group Interviews*

<b>Communication</b>	<b>Stress/Anxiety</b>	<b>Planning/Clarity</b>
<ul style="list-style-type: none"> <li>• Current communication ineffective</li> <li>• Questions are not answered by parking or dept. managers</li> <li>• More frequent updates needed</li> <li>• More lead time on parking changed needed.</li> <li>• Want weekly communication via internet.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of long term plan creates anxiety.</li> <li>• Uncertainty in parking combined with new time system (KRONOS) heightened anxiety of being on time.</li> <li>• General stressful nature of work heightens parking stress.</li> <li>• Good employees want to be on time, hard</li> </ul>	<ul style="list-style-type: none"> <li>• If there is a plan, employees are unaware</li> <li>• Do not believe there is a plan for parking</li> <li>• Lack of plan indicates UCH does not <b><u>value</u></b> employees</li> <li>• Provide in-depth answers for parking, not just logistical facts.</li> <li>• Ok if it will take time or money, provide explanation.</li> <li>• Question whether</li> </ul>

- 
- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• Response to complaints = <u>value</u> to employees</li> <li>• Want updates from highest level VP.</li> <li>• Effective communication would alleviate managers responding to parking complaints.</li> <li>• Communication effort needs to be more regular and through more effective channels, i.e. managers and e-mails.</li> </ul> | <p>with parking = more stress related to performance.</p> <ul style="list-style-type: none"> <li>• Longer it takes to walk in, more upset employees get, shuttle would alleviate that stress.</li> </ul> | <p>parking is a priority for administration.</p> <ul style="list-style-type: none"> <li>• Want clarity to alleviate stress.</li> <li>• Acknowledge working on solutions, even if not quick fix, especially for safety.</li> <li>• Employees feel that they do not know what is going on related to parking</li> <li>• Managers did not have info and couldn't seem to get info on parking</li> </ul> |
|--|--|--|

#### Safety

- Never see guards in parking lot.
- Working late and long hours – dark when leaving.

#### Productivity

- New time system (KRONOS) = stricter time measurement and parking impacts
-

- 
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• See security guard where patients enter but not where employees walk.</li> <li>• Having security present = employee <u>value</u>.</li> <li>• Anxiety/stress= lack of planning related to future of parking far way an safety.</li> <li>• Feeling safe = <u>value</u>.</li> <li>• Better lighting important.</li> <li>• Shuttle wanted.</li> </ul> | <ul style="list-style-type: none"> <li>time of clocking in.</li> <li>• Time is wasted on employees complaining to each other about parking.</li> <li>• Effective communication would alleviate managers responding to parking complaints.</li> </ul> |
|--|--|
- 

## Discussion

### *Interpretation of Results*

Upon reviewing the data, the collaborative team discussed the possible interpretations of the results. The importance of and interest in the parking problem was indicated by the number of respondents in such a short time, an 80% response rate in 72 hours. Additionally, the majority

of the responses from the electronic questionnaire indicated dissatisfaction with the current parking policies at Fitzsimons. Percentages of employee dissatisfaction were above 50%, which indicated areas of significance, such as adequate parking, safety, getting needs met and feeling valued. These levels of dissatisfaction might indicate that the current parking policies, while seemingly improved, were not meeting the needs of UCH employees or that there was some other issue attached to concerns about parking. The collaborative team agreed that these high levels of dissatisfaction required an even deeper evaluation of the focus group results.

*Clarity and communication.* The review of the focus group data began to illustrate that the dissatisfaction related to parking fell into three categories: (a) communication, (b) planning by administration, and (c) safety. When addressing these areas of concern, the respondents indicated underlying feelings of stress, anxiety and feeling inconsequential to administration. Employees clearly expressed their feelings about the lack of knowledge regarding both short-term and long-term plans for parking. Having little or no knowledge of the parking plans seemed to elicit feelings of anxiety and indicated the lack of employee value by the organization. When the employees stated that they would be open to hearing any information related to parking, even if it was not positive, it seemed to indicate that communicating the parking plans more effectively is essential to increasing satisfaction about parking. Employees also expressed a desire to know detailed information about parking, such as timing for new lots, potential costs, how long it would take to have enough parking, regardless of the positive or negative nature of the information. This might show that employees were not necessarily dissatisfied with the logistics of parking, rather dissatisfied with the communication about parking information. The employees indicated that the ineffective communication methods also created feelings of anxiety and their perceived unimportance to the administration. Poor communication about parking

plans gave the perception that the administration must not have any parking plan. The ineffective communication of parking plans lead to the employee assumption that no plan existed. The collaborative team agreed that the effective communication of the parking plans was very important to creating a solution.

*Managers.* Another finding from the data indicated that employees, frustrated by the lack of available parking information, attempted to seek out the needed information from managers. Managers were unable to provide the proper parking information and complained that they did not have access to this information. Not being able to obtain parking information from department managers heightened the employee concern about the lack of parking plans. The lack of information indicated to employees the administration's lack of concern related employee dissatisfaction about parking, increasing the feelings of anxiety, stress and not being valued.

*Kronos.* Interestingly, the data showed that the new parking policies came into effect at the same time as the new 'time card' system called Kronos. The new time system required employees to physically swipe their ID badge within 4 minutes prior or after their scheduled start time at designated locations. This was major change for employees who previously just came to work, got to their floor and let the manager know their arrival time. The simultaneous introduction of Kronos, coupled with changes in parking, the uncertainty of where to park and how long it would take to find parking place, heightened employee stress and led to increased dissatisfaction.

*Safety.* Safety was another issue of great importance to the employees. The absence of a noticeable security guard during peak hours of arrival and departure again indicated poor planning. The lack of a visible security guard led employees to believe that the UCH administration lacked concern for employee well-being. None of the employees had personally

experienced any safety problems, yet the perception was that UCH did not care what happened to the employees and that there was no plan in place. This interpretation of this data reflects the consistent theme of stress and anxiety related to parking as well as poor communication about planning.

*Existing protocols in healthcare.* Surprisingly, employee dissatisfaction did not stem primarily from the problems related to available parking spaces. The collaborative team sensed that employees were trying to manage the anxiety that they experienced from uncertainty associated with parking changes, as part of their daily routine. Many of the employees at UCH function in a healthcare setting that is controlled by planning, protocols and systems. Even when emergencies occur within the hospital, protocols are in place for emergency responses. Managing the new parking situation both at the beginning and end of the day, when the majority of an employee's work is based on systems and sequential orders may be even more disturbing to employees in healthcare setting than in other industries. The inability to be prepared for parking changes, based on lacking communication, was indicated regularly in this research project.

### *Interventions*

Recognizing the problem, diagnosing the situation, gathering, reviewing and interpreting data transitioned led the group to the planning stage of this action research project.

At this time, involved members chose a solution, which serves as the fourth step in the selected action research model. The assessment and review of the results by the collaborative team allowed for the creation of several potential interventions for the employee parking problem at University of Colorado Hospital.

The proposed interventions have two common themes, which are continually presented in each of the proposed solutions. The common themes were employee concerns related to



communication and feeling valued by the administration. Communication and feelings of value are addressed in each of the proposed solutions to the problem. The recommendations selected by the team take into consideration the limited budget of a private, non-profit organization, the importance of a supportive leadership effort, safety of employees and the need to improve communication related to parking at the Fitzsimons campus. The consideration of issues such as time, financial constraints and competing priorities will ultimately influence the feasibility of each recommendation.

*CAPP (Communication about Parking Plans)*. The first intervention is intended to address the issue of an ineffective communication effort, coupled with the employees' desire to understand the long- and short-term plans for parking. University of Colorado Hospital needs to create an enhanced parking communication plan that focuses on clarity about parking and has the ability to deliver the information electronically and with appropriate frequency. By implementing this intervention, University of Colorado Hospital would address employee concerns about parking plans, which should reduce the stress and anxiety of employees. This plan would be called CAPP (Communication About Parking Plans). This communication effort will be delivered monthly via e-mail to every UCH employee. There would be five segments to the e-mail: (a) long-term parking plans or changes, (b) short-term parking plans or changes, (c) responses to questions or complaints in a general format, (d) contact information for questions, and (e) the monthly winners for the employee of the month parking place. The incentive for reading the CAPP report would be to find out the identity of the employee who will receive the special parking place. This would greatly enhance readership.

The CAPP report will provide significant detail about the parking plans, the impact on employees, the reasoning behind the plans and a time-line for action. As Cummings and Worley

(2005) noted, “lack of adequate information fuels rumors and gossip and adds to the anxiety generally associated with change” (p. 159). The areas of short-term and long-term parking plans will be addressed in each CAPP e-mail, even if there is no significant change in the planning. By acknowledging no change, the communication will help to mitigate the assumption by employees that no changes really mean that there are changes administration is not sharing. This communication plan will replace the existing efforts that provide sporadic parking information in a printed piece, STAT, that is distributed departmentally throughout the organization, and has few readers. Additionally, the parking updates currently on the internal website, while having strong content, frequently are not read by employees, who expect that the most important information will be sent to them rather than having to seek it out themselves. The CAPP report will be a collaborative effort between the Vice President of facilities, the director of parking, the communication specialist and the marketing department. There would be minimal cost for this intervention.

*Enhanced security effort.* The issue addressed in the second intervention is related to employee concerns about safety. UCH will provide additional security guards, year round, in each of the main employee lots. These security guards would be present during the peak hours of arrival and departure. Security that is visible to employees during these peak hours should increase satisfaction related to parking safety. Furthermore, security that rotates between stationary positions and circulating to smaller lots, should address the concern of security improvements for all employees, not just ones who park in the main lots. The addition of the security guards year-round, instead of just in the darker, winter months will also address the safety concerns. This second intervention also should reduce employee anxiety related to parking proximity to the buildings and the distance of the lots from Colfax Avenue as well as

increasing feelings of value by showing employees that their safety is worth the cost of additional security. Communications will be disseminated to all employees about the new security plan, but may not reveal the current security plan to avoid releasing too much information that may result in decreased effectiveness of providing appropriate protection for employees. This intervention has significant financial ramifications for the organization. Three new security guards, their vehicle and maintenance fees, along with allocated time for the management of new employees will cost the hospital approximately \$300,000 annually.

*Managerial involvement.* The data implied that the employees felt that the administration and department managers were not taking the time to inform them about parking and had very little knowledge about the parking plans. Therefore, increasing employee satisfaction regarding parking would be accomplished through manager interventions. This is recommended as a strategic initiative for UCH leadership. Successful organizational transformation is the role of senior executives and managers (Cummings & Worley, 2005). In order to achieve a successful transformation in the parking policies, UCH would mandate that managers provide parking updates at monthly meetings. Managers must go through monthly debriefing sessions from the parking department to provide information to their staff and have the ability to direct staff on how to obtain additional parking information. In order to accomplish this strategic initiative, a departmental measurement of employee satisfaction related to information about parking, not parking itself, will be a metric for managers on their annual evaluation. This evaluation is tied to performance pay. Making this initiative part of the yearly evaluation should help to increase compliance and efforts on the part of the managers. This recommendation would require only 12 to 20 hours of meetings per year and take place at already scheduled staff meetings, making it a feasible solution. Not only does this recommendation provide the desired parking information

through yet another avenue, it may reduce the distrust associated with the administration and increase feelings of employee value.

After the implementation of the recommended intervention, the action research model calls for a method to evaluate the success of the change. To measure the effectiveness of the recommended intervention a follow-up electronic questionnaire would be provided. An effective change would be shown by a decrease in employee dissatisfaction about parking and increase in employee feelings of value. In addition, an increased knowledge of parking plans by UCH employees should be demonstrated. This questionnaire should be distributed approximately 6 to 8 months after the intervention has been implemented.

*Recommended intervention.* Having completed the fourth step of the action research model, the collaborative team agreed that a combination of the first and third interventions should be utilized to address the parking problem at the UCH Fitzsimons campus. The CAPP report and manager involvement are both of minimal cost to the organization and use frameworks, such as monthly e-mails and annual employee evaluations, already established at UCH. Both interventions address the major issue of employee dissatisfaction related to parking. Loyal and satisfied employees are valuable to a company and the company's future success will depend on the ability to attract and retain productive employees who will be satisfied (Martensen & Gronholdt, 2001). The CAPP report would increase access to more detailed parking information, provide built-in motivations to read the information (access to the special employee parking space information) as well as the appropriate method of delivering the information. By enacting this report, the organization has the potential to decrease the stress and anxiety, and increase positive feelings of value for employees by administration. Managers become accountable for providing valuable information, stress due to ambiguity about parking is

reduced, and employees should feel more valued by administrators and managers. Decreased stress related to parking ambiguity, increased feelings of value and trust in administration are all potential positive outcomes from this intervention as well.

### *Reflective Analysis*

*Collaborative team.* While a necessary part of the action research model, the collaborative team aspect of this effort created some challenges. At the beginning of the project the entire team was very supportive in participating in solving problems with parking. As time went on, team members faced competing priorities outside of this project, and their dedication to the review of questions, data and input fluctuated. In a healthcare setting, it is not unusual to be required to shift focus quickly, and this did happen during the course of the project. Even with that obstacle, all team members provided valuable input during various parts of the research effort. Some of the team members directly involved with parking may have had personal reactions to some of the results. Additionally, the different managerial styles of the team members seemed to impact their view of the parking problems. Certain team members took a more “parental” approach to their employees, wanting to solve the parking problems to increase employee satisfaction. Other collaborative team members took an approach that their employees should not “complain” so much. These different styles were actually helpful by bringing a variety of perspectives about employee benefits, when we created data-gathering questions. Despite the different management styles and limited availability, the collaborative team played a pivotal role in the action research project and was crucial to the success.

*Personal leadership.* One of the greatest lessons I learned during the action research project regarding leadership was the delicate balance a leader encounters, weighing the needs of the organization against the needs of the individual employee and me as a leader. For example,

parking for the organization can be decided by the impact on finances, resources, policies, space availability, etc. All of these forces that impact parking are not personalized. Yet, the outcomes of making parking decisions are frequently taken personally by employees. Employees may personalize issues such as parking, because the employer/employee relationship can be seen by the employee as personal, rather than economic. Employees might feel that the employer sets rules and provides rewards based on “feelings” about an employee, rather than decisions an employer makes based on resources and financial impact to the company. It became apparent that it is impossible to meet 100% of the financial needs of the organization related to parking and 100% of the employee needs, making leadership a tenuous task of managing competing needs. I hope to have the insight and knowledge needed to reach an effective balance to meet the needs of both the organization and the employee, and lead successfully.

Another aspect of leadership that was enlightening to me during the research process was the challenge of leading people with seniority in age and experience. It can be intimidating to ask superiors to manage tasks and be accountable, and not feel threatened by their seniority. I found that following through on my commitments to the parking project and the existing foundation of respect with the senior team members led to a mutual understanding that I was the leader for this project, regardless of seniority. Again, overcoming my feelings of intimidation by putting the goals of the project before my desire to placate seniority was an important lesson in leadership. This was echoed in my studies throughout the Masters of Science in Management program, where I often found that my desire to please people needed to be balanced in respect to my desire to obtain and maintain leadership roles.

*Learnings and implications.* Using hindsight to critique this research project led me to see certain modifications that would create a more successful research effort in the future. It

became apparent that collecting data with a 6 month gap in between the second and third set of data collection may not have been ideal. Some of the issues that employees reported related to parking dissatisfaction were seasonal. There were many more complaints in the winter months regarding snow removal, and that issue was never brought up during the summer data-gathering process. Also, changes in parking that were highly upsetting at the beginning of the process seemed less upsetting 6 months later, most likely being diffused as a function of time passing. With time passing the changes in parking that upset employees may have become part of their daily routine, lessening the negative impact of change. Thirdly, taking 6 months in between gathering data sets also allowed for natural improvements in the parking problems, which may have had an impact on the results. Collecting data in a tighter timeline possibly would have mitigated some of these potential impacts.

Another potential weakness of this project was the use of language when crafting both questionnaire and focus group questions. While most of the questions presented in both the questionnaire and focus groups elicited a large number of detailed responses, I found myself wishing I had worded certain questions differently or more succinctly, using greater detail. The fear of not getting enough information led to broader questions instead of working harder to pinpoint the employee perception of parking by asking more specific questions. If repeating the project, more detailed questions may provide stronger results.

At this time, University of Colorado Hospital has not implemented the recommended interventions. Yet, in the course of asking questions about the problem and trying to understand the data, some changes have started to take place. The communication has begun to improve just by discussing the different communication methods with the marketing team. More regular updates have been appearing possibly due to conversations about parking problems through this

project. The communication improvements are also being applied to other issues, for which communication and employee understanding are key elements. The recommendations related to communication and parking problems, such as an e-mail newsletter that is sent to employees rather than sought out by employees, is are being considered for the internal communication methods about a potential pandemic of Avian Flu. This may indicate the organizations willingness to implement the parking interventions in the near future, again, managing the quickly shifting priorities of University of Colorado Hospital and healthcare in general.

### *Conclusion*

With approximately 3500 employees and limited space, parking is a real issue at University of Colorado Hospital. Most UCH employees drive to work and will look for a parking space and hope for parking policies that meet their needs. This action research project considered the problem of the new and improved parking policies that accompanied UCH's move from the 9<sup>th</sup> and Colorado Boulevard Campus to the Fitzsimons campus. Data indicated that low levels of satisfaction stemmed from concerns with safety, poor communication and diminished feelings of value for employees. Seeking to change these concerns and perceptions, the project's collaborative team selected an intervention that addressed these issues through an improved communication plan and increased safety efforts.

Addressing the parking problems through an action research project, gave UCH potential solutions. Bringing about planned change potentially increase future effectiveness in managing other changes an organization may face (Cummings & Worley, 2005). With ever changing needs in healthcare, managing change effectively may increase UCH's ability to compete in the ever competitive market of regional hospitals and secure a place in the nations top hospitals, by being more adaptive than other similar organizations.



## References

- Atkinson, P. (2005). Managing resistance to change. *Management Services*, 49, 14-20.
- Anderson, T. (1996). A new model emerges for health facility parking lots. *Health Facilities Management*, 9, 72-74.
- Burns, D. (2005, March). Challenges in healthcare parking and the role of parking master planning. *Parking*, 44, 19-25
- Coughlan, D., & Brannick, T. (2005). *Doing action research*. (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Cummings, T.G. & Worley, C.G. (2005). *Organization development and change* (8<sup>th</sup> ed.). Mason, OH: South-Western College Publishing.
- Cunningham, J.B. (1993). *Action research and organizational development*. West Port, CT: Praeger.
- De Meuse, K., & McDaris, K. (1994). An exercise in managing change. *Training and development*, 48, 55-58.
- Fink, A., & Kosecoff, J. (1998). *How to conduct surveys: A step-by-step guide* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications
- Labianca, G., Gray, B. & Brass, J., (2000). A grounded model of organizational schema change during empowerment. *Organizational Science*. 11, 235-258.

Martensen, A. & Gronholdt, L. (2001). Using employee satisfaction measurement to improve

People management: An adaptation of Kano's quality types. *Total Quality Management*.

12, 949-957

Nadler, D.A. (1977). *Feedback and organization development*. Upper Saddle River, NJ:

Prentice-Hall/Pearson Education.

Pearce, J.A., II, Robinson, R.B., Jr., & Sandberg, M.E. (1989) *Change and organization*

*development*. In J.A. Pearce & R.B. Robinson Jr. (Eds.), *Management* (pp. 375-406).

University of Colorado Hospital (2004, September 13). *History of Colorado Hospital*.

Retrieved September 13, 2004, from

<http://www.uch.edu/content/employment/content.asp?org=uch&index>AboutusDocs&title=History>

University of Colorado Hospital (2005, March 13). *Fact Sheet*.

Retrieved March 13, 2004, from

<http://www.uch.edu/content/aboutus/content.asp?org=uch&index=News/Events&title=Fact%20Sheet>

Whitworth, B., & Riccomini, B. (2005, March). Unlocking higher employee performance.

*Communication World*, 18-22.

Appendix A

Parking at University of Colorado Hospital, Fitzsimons Campus Survey Questions

1. The University of Colorado Hospital has provided enough parking for all employees?

Strongly Disagree ☐  
Disagree ☐  
Strongly Agree ☐  
Agree ☐

2. I understand where I am supposed to park when I come to work?

Strongly Disagree ☐  
Disagree ☐  
Strongly Agree ☐  
Agree ☐

3. The location provided for parking are an acceptable distance from by building?

Strongly Disagree ☐  
Disagree ☐  
Strongly Agree ☐  
Agree ☐

4. In my opinion, concern for personal safety, related to parking, has been addressed by the administration?

Strongly Disagree ☐  
Disagree ☐  
Strongly Agree ☐  
Agree ☐

5. Convenient parking would influence whether or not I would accept a position at The University of Colorado Hospital?

Strongly Disagree ☐  
Disagree ☐  
Strongly Agree ☐  
Agree ☐

6. Overall, parking at The University of Colorado Hospital meets my needs?

- Strongly Disagree ☐
- Disagree ☐
- Strongly Agree ☐
- Agree ☐

7. In my opinion, the administration at The University of Colorado Hospital values employee input about parking?

- Strongly Disagree ☐
- Disagree ☐
- Strongly Agree ☐
- Agree ☐

8. Which of the following parking issues are a concern, please check all that apply:

- Having a consistent place to park ☐
- Cost of parking ☐
- Process for voicing concerns ☐
- Availability of parking ☐
- Convenience ☐
- Other, please specify ☐

9. Do you park in the same lot every day?

- Yes ☐ No ☐

10. Do you know who to contact about parking questions/complaints?

- Yes ☐ No ☐

11. Have you ever registered a complaint about parking?

- Yes ☐ No ☐

12. If you have registered a complaint about parking, did you get a satisfactory response?

- Very Unsatisfactory ☐
- Unsatisfactory ☐
- Satisfactory ☐
- Very Satisfactory ☐

13. My position is:

- Nurse ☐
- Doctor ☐
- Other clinical staff ☐
- Support staff ☐
- Administrative ☐
- Other, please specify ☐

14. I work in the:

- Anschutz Inpatient Pavilion (AIP) ☐
- Anschutz Outpatient Pavilion (AOP) ☐
- Anschutz Cancer Pavilion (ACP) ☐
- Rocky Mountain Lions Eye Institute (RMLEI) ☐
- Other, please specify ☐

15. What I like about the parking at UCH is....

16. What I do not like about parking at UCH is...

17. Parking at UCH can be improved by....

## Appendix B

### Group Interview Questions for Employee Parking Problems at University of Colorado Hospital

Question 1: Would registering a complaint make a difference?

Question 2: What would indicate to you that UCH valued employee input about parking?

Question 3: What issues do you feel the hospital needs to address related to safety and parking?

Question 4: Why does parking evoke such a great deal of emotion?

Question 5: How could UCH improve employee parking?